

Abstract of the Disclosure

A modular and scalable seamless tiled display apparatus includes multiple display devices, a screen, and multiple lens assemblies. Each display device is subdivided into multiple sections, and each section is configured to display a sectional
5 image. One of the lens assemblies is optically coupled to each of the sections of each of the display devices to project the sectional image displayed on that section onto the screen. The multiple lens assemblies are configured to merge the projected sectional images to form a single tiled image. The projected sectional images may be merged on the screen by magnifying and shifting the images in an appropriate manner. The
10 magnification and shifting of these images eliminates any visual effect on the tiled display that may result from dead-band regions defined between each pair of adjacent sections on each display device, and due to gaps between multiple display devices.